(19) World Intellectual Property Organization International Bureau



1 (1801) 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 |

(43) International Publication Date 12 April 2007 (12.04.2007)

PCT

(10) International Publication Number WO 2007/038984 A1

- (51) International Patent Classification: *G06F 17/50* (2006.01)
- (21) International Application Number:

PCT/EP2005/054928

(22) International Filing Date:

29 September 2005 (29.09.2005)

(25) Filing Language:

English

(26) Publication Language:

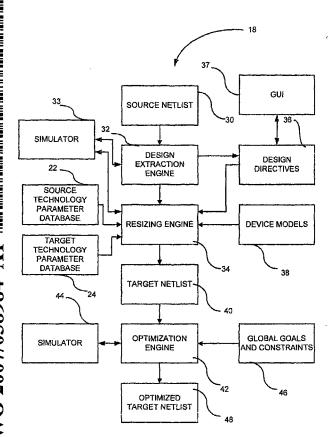
English

- (71) Applicant (for all designated States except US): MEN-TOR GRAPHICS CORP. [US/US]; 8005 SW Boeckman Rd., D-4, WILSONVILLE, Oregon 97070-7777 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): HAMMOUDA, Sherif Ahmed Abdel-Wahab [EG/EG]; c/o MENTOR GRAPHICS EGYPT, 51 Beirut St. Heliopolis, CAIRO, 11341 (EG). DESSOUKY, Mohamed Amin Ibrahim [EG/EG]; c/o MENTOR GRAPHICS EGYPT, 51 Beirut

- St. Heliopolis, CAIRO, 11341 (EG). TAWFIK, Mohamed Sameh [FR/EG]; c/o MENTOR GRAPHICS EGYPT, 51 Beirut St. Heliopolis, CAIRO, 11341 (EG).
- (74) Agents: JORIO, Paolo et al.; STUDIO TORTA S.r.l., Via Viotti, 9, I-10121 TORINO (IT).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LY, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: ANALOG DESIGN RETARGETING



(57) Abstract: An analog retargeting system and method are disclosed for converting a circuit from a source technology to a target technology. Thus, an analog circuit in a 5 source technology can be converted to another technology while maintaining substantially the same circuit behavior and specifications as the original design. The conversion includes analyzing and resizing the circuit at the device level. For example, the analysis may include determining a mode of operation for a transistor and resizing the transistor based on the mode of operation. In another example, the 10 analysis may include determining node voltages coupled to a device and the resizing strategy may be adjusted based on the determined node voltages.

WO 2007/038984 A1

WO 2007/038984 A1



FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, For two-letter codes and other abbreviations, refer to the "Guid-RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

ance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

with international search report